

DECLARATION AND POWER OF ATTORNEY

As the below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and only inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled:

CHILD-BASED STORYTELLING ENVIRONMENT

the specification of which:

- ☒ is attached hereto.
was filed on July 28, 2000 as
☒ Application Serial No. 60/221,600
and was amended on _____. (if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventors' certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

Priority Claimed

(Number) (Country) (Day/Month/Year Filed)

[] Yes [] No

60/221,600
(Application Serial No.)

I hereby claim the benefit under Title 35, United States Code, § 120, of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, we acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

[illegible]

I hereby appoint Jacob E. Vilhauer, Jr., Reg. No. 24,885; Charles D. McClung, Reg. No. 26,568; Dennis E. Stenzel, Reg. No. 28,763; Donald B. Haslett, Reg. No. 28,855; William O. Geny, Reg. No. 27,444; J. Peter Staples, Reg. No. 30,690; Kevin L. Russell, Reg. No. 38,292; Bruce W. DeKock, Reg. No. 40,585; Nancy J. Moriarty, Reg. No. 40,733; and Timothy A. Long, Reg. No. 28,876; all of the firm of Chernoff, Vilhauer, McClung & Stenzel, LLP, 1600 ODS Tower, 601 SW Second Avenue, Portland, Oregon 97204, Telephone No. 503-227-5631, my attorneys, jointly and individually, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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CHILD-BASED STORYTELLING ENVIRONMENT

BACKGROUND OF THE INVENTION

5 The present invention relates to an interactive storytelling environment.

10 The computer gaming industry has developed many different types of software programs in an attempt to entice different users to purchase their software. For example, shooting-based action games normally provide a fictional character for the user, such as Quake, or otherwise permit the user to select a fictional character from among a list of potential characters. With the fictional character selected, the user then embarks on the adventure provided by the game. The adventure may involve searching through a map to destroy monsters and other characters, while also locating treasures and revealing secrets that the game designers incorporated. In many cases, the same scenario may be repeated until the user overcomes all of the obstacles and "solves" the game. At this point the game has less appeal to the user, other than to attempt to "solve" the game once again. Some of these games even permit the user to create their own maps and determine the number and location of monsters. Over the past several years, the trend in such game development has been to increase the complexity of the obstacles and provide an ever increasing three-dimensional real-time graphic realism. In addition, there is no emotional growth of the user or the game based characters. While high graphic realism and complex characters are desired by many users, the game remains only as good as its underlying interactive programming which is static in story and content. Further, normally the rewards are for negative social values, such as winning at all costs and killing. Also, the rewards are frequently based on dexterity centered activities.

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Another type of game focuses on the creation of a civilization or world, while frequently limiting the computational resources directed toward three-dimensional real-time graphic realism. Such games may initially provide the user with a non-advanced world, such as a world in the stone age. The user then manages the resources provided by the game in order to create a successful civilization. The user may create fighting devices to conquer other civilizations, if desired, such as those available in Age of Empires distributed by Microsoft Corporation. In some circumstances, the game may provide the capability of interacting with other players using the Internet.

Yet another type of game focuses on teaching children by providing the child with a fictional character to interact with. Based on the fictional character's attributes, the child then attempts to solve problems provided by the game. Many such games teach counting, reading, and mathematics to children by interaction with the fictional character. The game also inherently, limits the parental involvement with the child, except for the parent sitting with the child to help select the appropriate actions. In addition, pure educational games normally have limited graphical interfaces.

While these fictional character based games may be entertaining to the user, they are inherently limited to the creative programming ability of the game designer. In addition, the user is limited to role-playing with the predefined characters that are made available. Moreover, the typical scenario that is provided is designed primarily for entertainment value and potentially some limited scholastic achievement.

SUMMARY OF THE INVENTION

One of the most important activities for the development of a child is to empower the child by listening

to their story. Listening to the child may take many forms but in each case the child craves respect and desires to express himself. Accordingly, there is an unfulfilled need to provide tools and activities that assist children in
5 expressing themselves. After consideration of this unfulfilled need the present inventor came to the realization that the existence of unique storytelling environments which are based upon a story of the child provide a unique opportunity to create other items that
10 empower the child.

The present invention overcomes the aforementioned drawbacks of the prior art, in a first aspect, with a computer based system for children including at least one scenario that creates a psychological profile for a
15 particular one of the children based upon the psychological characteristics of the child as a result of interaction with the child or the game. The game modifies the scenario for the child based upon the psychological profile.

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BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an exemplary embodiment of a block diagram illustrating the psychological profiling of the present invention.

25 FIG. 2 is a diagram of an exemplary construction of an avatar

FIG. 3 is an exemplary block diagram of a frame selection of FIG. 1.

30 FIG. 4 is an exemplary block diagram of the frame generation of FIG. 4.

FIG. 5 is a block diagram of the creation of a trading card in accordance with one aspect of the present invention.

FIG. 6 is a block diagram of the creation of a book in accordance with another aspect of the present invention.

FIG. 7 is a block diagram of the creation of a postcard and/or greeting cards in accordance with yet another aspect of the present invention.

FIG. 8 is a block diagram of the creation of a video in accordance with still another aspect of the present invention.

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DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Today's children are born into the presence of technologies some of their parents never dreamed of, and they grow up using them as naturally as they speak their native tongue. Parents want to provide their kids with all the advantages and growth experiences that can be derived from electronic educational and entertainment products. However, parents fear that this exposure will provide their children too much, too soon—letting them plug in and tune out. Or worse, that their children will be negatively influenced and exposed to inappropriate material through interaction on the Internet. Parents seek online activities for their children that: (a) engage and inspire, (b) provide tools to help parents and teachers educate, (c) provide real-world applications and teach positive social values, (d) interact on increasingly sophisticated levels as their children grow, (e) connect children with family members and friends, and (f) monitor the information accessible, preventing exposure to inappropriate material.

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The American Academy of Pediatrics study on the effects of electronic media on children shows that watching television and playing typical action-based video games, such as those described in the background, may isolate children and limit their thinking and imagination. Yet,

most studies conclude that this media can be a powerful learning tool for children and positively influence creative and emotional development when the content of the programming is appropriate. As an
5 alternative to typical action based games, parents, grandparents, and educators are searching for a safe and entertaining way for children to experiment and explore the virtual world. Currently, as of yet, these needs have not been adequately addressed nor any guidance been provided as
10 to how such needs could be addressed.

The principal question concerning conventional game developers has always been purely technical: "what can you do with a digital construct, and how good can you get it to look?" The question that should be asked is based on a
15 different premise, of not only what can be done, but to what end. The present inventor determined that the gaming environment should inspire, engage, and entertain children through storytelling. Storytelling has always been a key component to human social interaction and the primal way for
20 people to communicate and identify with one another. The storytelling environment of the present invention is based on this belief and uses the cathartic power of narrative to assist children to communicate and empathize with others. In addition, the present inventor came to the further
25 realization that not all children learn and play the same way, so the storytelling environment should therefore likewise adapt to the child, as opposed to the child adapting to the environment. To achieve this advancement, the system starts with an assessment of the individual which
30 empowers a child to learn and play in the ways most natural and inspiring to him or her. In addition, the system includes real-world applications and rewards for positive social values like honesty, sportsmanship, compassion, and courage. Moreover, the children are encouraged to be their
35 best because they actively participate and take

responsibility for creating and governing their environment. Also, each environment may be designed to be a multi cultural learning ground for the global skills that our children will need to envision the future. In order to achieve these goals, the system permits parents, care givers, and family members to participate in the learning and experience of their children by collaborating with their children through sharing stories. In this manner, the children are also provided a safe interactive environment.

In light of the goal of inspiring, engaging, and entertaining our children, the development and expressions of a child is a miracle of individuality upon which the present inventor came to the further realization that interactive storytelling with other children (and adults) is the primal tool that permits children (and adults) to connect and communicate the experience of our humanity. The child's story that they experience includes their life as it unfolds. As the child watches a movie the child relates with the characters and experiences the events and emotions that the movie has to offer. This is a highly personal experience for the child. Accordingly, the storytelling environment should permit the child to share and communicate in an electronic world, and thereafter take what they have learned and bring it back to their daily world. In addition, educators, care givers, and parents should likewise be permitted to be involved in the child's highly personal storytelling experiences. To facilitate such a system, the storytelling environment should assess who the child is, how the child learns, and facilitate the sharing of the experiences therein.

With the realization that children are each individuals and that each learn and play in a different manner, there is a need for the storytelling system to be adaptable to the individual child as opposed to a one size fits all system. In addition, in our hectic world where

parents are primarily working and teachers are burdened with to many students, the individualized attention that children so desperately need is often lacking. Therefore, the storytelling system should likewise be able to assess the child and tailor itself to the needs and abilities of the particular child. In this virtual environment, the children may be the heros and heroines of their own story by projecting themselves into the virtual environment. For example, in this virtual environment the children may work out their fears and come to a resolution.

Referring to FIG. 1, the present inventor came to the realization that the storytelling and learning environment is enhanced if a psychological profile is initially created for each child prior to entering the storytelling and learning environment. A separate psychological profile for each particular child is created based on the actual psychological profile of the child, as opposed to selecting attributes for a fictional character. This permits the remainder of the learning environment to be tailored to the actual child, his likes, his dislikes, and his needs.

In order for the child to tell the story of himself through the storytelling environment, the system preferably starts by obtaining a physical description of the child. The physical description is obtained first because this allows for a physical being, or otherwise a "form," upon which to attribute the child's personality. To develop the physiological profile suitable for initializing the storytelling environment, the computer system requests physical information about the child, including name, age, and gender (i.e., male and female). The name of the child provides a convenient way of identifying and communicating in a personalized and intimate way with the child. In addition, using the actual name of the child likewise permits the child to more readily experience his own story.

The age of the child likewise permits customization of the content of the game based upon the age of the child. In addition, the content of the game may be customized based upon the interaction of different children and their
5 respective ages. Also, as the child ages over the days, months, and years the system adapts itself to automatically modify the child's preferences in a suitable manner. In this manner, the system dynamically adapts and presents a different storytelling environment than would have been
10 presented had the age of the child remained unchanged. As described later, the potential characters presented to the child to build the profile change based upon the age of the child. For example, a selection of images suitable for a teenager may be presented to a teenager, while a selection
15 of pre-teenage images may be presented to a pre-teenage child. In addition, as the child ages in real life over time, the previously selected image may be automatically updated by the storytelling environment to a more suitable image. Also, the system may periodically prompt the child
20 as the child ages over months and years, to update the image. In this manner the storytelling environment remains more relevant to the child.

The gender of the child similarly assists in customizing the content of the game that would be most
25 appropriate for the selected gender. In addition, the gender assists in selecting the appropriate characteristics and appearances of the child. Other general information may include, for example, the child's favorite color, the child's favorite game, the child's interests, the child's
30 favorite toy, the child's favorite music, the child's favorite animal, and the child's favorite food. Likewise this general information may be used as the basis of customization of the learning and storytelling environment. Because of the visual nature of the child, and the need for

physiological profiling, the request for the information may be in the form of a room or other graphical environment where the child selects images or interacts in a manner corresponding to the questions presented. This permits a
 5 non-intrusive nonquestionnaire based manner for obtaining information. For example, the child may select a red button from a selection of differently colored buttons thereby indicating red as the favorite color. This non-questionnaire based technique is especially suitable for
 10 young children.

After obtaining the physical information regarding the child, such as name, age, and gender, the system then preferably starts to select the exterior physical appearance of the child. The physical appearance of the child allows
 15 the child to more realistically experience the storytelling environment based upon the previously obtained physical attributes. In this manner the child may identify their "self." The selections provided for the child in relation to the their exterior appearance are preferably dependant upon the previous physical information provided. Referring
 20 to FIG. 2, to interact with the game the child uses an avatar which is a graphical icon for interaction with himself and others. Preferably, the avatar resembles a child so that the realism of the game is heightened, as opposed to using a "turtle" or "frog" as an avatar. The
 25 child may submit a picture to the storytelling environment to be used as his or her avator. As a representation of the actual child, this permits the child to more readily project themselves into the story. Initially a default body for the avatar is displayed according to the previously selected
 30 gender choice. The child (or adult) may change the size and proportions of the default body type, such as, taller, shorter, thinner, and fatter. The child (or adult) may likewise select the skin tone, hair style and its color, and
 35 facial features such smile, frown, grin, anguish, etc. In

addition, the child may import an actual image of himself to further increase the realism of the game. The child (or adult) may also select the clothing and costumes for the head, shirt, pants, shoes, etc. Also, the child (or adult) may select desired accessories, such as, rings, belt, jewelry, piercing, bracelets, glasses, etc. The items are appropriately located on the avatar to create an appropriate image. It is to be noted that the items presented are preferably based upon the previous profile obtained. While the selection and outfitting of the avatar may appear to be merely a convenient technique for the creation of an avatar, the present inventor came to the realization that the particular selections, or groups of selections, may likewise reveal psychological meanings that are attributable to the particular child. These additional psychological meanings are likewise used in the storytelling environment to provide an interaction which is different than would be provided if the selections were different or otherwise not available. In addition, during different sessions with the storytelling environment, the child (or adult) may change their wardrobe, accessories, body type, etc. which may result in a modification of the psychological profile. In this manner, the storytelling environment may track the child's current psychological profile, which may change, at least in part, from day to day or otherwise over time.

After further thought, the present inventor came to the realization that the inclusion of not only direct physical attributes should be included, but also, health based issues, physical disabilities, and emotional disabilities. In this manner, the interaction with the storytelling environment may be different than would be provided if these were not provided. Also, the inclusion of such health, physical, and emotional information may be provided to healthcare professionals, parents, teachers, etc. as an indication of how the child interacts with their

environment. This is especially useful when the system presents an environment that is related to the specific information. For example, the child may have asthma and be presented with a scenario that includes flowers and plants.

5 After the physical description and exterior appearance of the child has been obtained, the child has then identified his appearance to the world and also created a character to which the child can more readily relate. With this character the child then identifies those items
10 that the child wishes to associate with himself. To facilitate this feature the child may select items to include in a backpack. The backpack provides a place for the storage of items to be used within the storytelling environment. Within the backpack the child may select and
15 store items of particular interest to the child. Such items may include, for example, a ball, a baseball bat, a football, a doll, books, marbles, etc. In addition, within the storytelling environment the child may also obtain or otherwise collect items. Further, the child may earn point
20 during the use of the storytelling environment and select items, such as game based vehicles. In this manner the items placed in the backpack, or otherwise selected, may be used by the system as indicative of the child's preferences, such as favorite things, favorite activities, and favorite
25 subject in school. In this manner, the system may provide particularized storytelling in a manner that is different than would be if one or more of the particular items were not obtained.

 The child may select a companion that is either
30 controlled by the computer ("computer companion") or a real person ("cooperate"). In the case of the computer companion, the child (or adult) may select its personality type. However, normally the computer companion does not include a complete profile. The system may modify the
35 interaction of the computer companion with the child in

accordance with the child's profile, so that the interaction is different that it would have been if the profile was different or not included. The cooperate may also include video footage of live actors or celebrities, for which the child may more readily interact with. This is much more realistic than talking to a paper clip. In the case of a cooperate, the system may include a complete profile of that person. In many cases, the cooperate is the child's parent, care giver, grandparent, or other child.

After creation of the physical and exterior appearance of the child, and preferably after selection of items for a backpack, the child then has a character upon which to attribute emotional, personality, and assessments thereto. The involvement of parents or other care givers is important for a children's learning environment so the present inventor also determined that the parents or care givers (adult) should likewise provide information relative to an ability assessment of the child themselves. Such information may be considered as a developmental snapshot. Likewise, this information may be used as a basis for the customization of the learning environment of the game for the actual abilities and needs of the particular child. The parents or care givers may complete an ability assessment of the particular child. The parental or care givers assessment may include, for example, (1) a social assessment which relates to the management of relationships with one another, (2) a language assessment which relates to understanding the meaning of words and their use, (3) a logic assessment which relates to solving problems in a step-by-step manner, (4) a numbers assessment which relates to understanding the use of numbers, such as mathematical problems, (5) a visual assessment which relates to visualizing images in the child's mind, (6) a spatial assessment which relates to manipulating an image in the child's mind, (7) a movement assessment which relates to

coordinating the child's body to express himself, and (8) an emotional assessment which relates to recognizing the relationship of himself and his feelings. In addition, a list of age specific concerns and issues may likewise be provided, such as, "afraid of the dark," "shy," "self esteem," and "nightmares." Each of these assessments may be used within the storytelling framework and interaction with the child to provide customized story line which is specifically tailored to the child's needs and parental concerns. The use of these assessments provides an interaction which is different than would be provided if the assessments were different or otherwise not available. In addition, the modification of these assessments over time deintensifies and intensifies the different activity elements of the game as the child progresses. The adult may likewise desire to and modify the experience of the child by input.

With the realization that all children are different in the way that they learn and play, a portion of the preferences and assessment tools may include "tests" such as personality tests, such as temperament or developmental ability, in order to assess how the child learns. One example of an appropriate test is the Luscher Color Test. In this manner, the game may learn what interests the child in a way to get the child to learn and play in an improved manner. This does not mean that the storytelling worlds are designed to be totally conducive to the particular child, but are in contrast preferably designed to help the child deal with the real world. For example, if the child is poor at math, but likes to take things apart, the system may design an activity where the child can take apart a machine and break the parts down into geometric figures.

During the interaction with the system, the child's preferences and favorites with respect to the

child's profile are updated and/or otherwise modified depending on the child's activities. For example, if the child selects an activity or item that includes a baseball, then an activity that includes a baseball game may be included, which otherwise would not have been included.

The use of pediatric psychology permits the environment to modify the initialization of the system and to modify play based on the child's state of mind. The profiling of the child provides a unique link to create appropriate customized stories, games, and activities, that the child experiences upon entering the virtual environment.

After preferably saving the profiling data and the corresponding psychological profile, the child may then enter the storytelling world (e.g., game). In general, the preferred system includes many worlds, each of which may include its own theme, where the child's attributes are constant between the different worlds. The child may select one of several different frames, each of which provides a different environment in which the child may explore.

Referring to FIG. 3, several different types of frames may include, for example, a magical forest, a desert island, an industrial factory, an underground cavern, a beach, a haunted house, a fairytale world, a ruined temple, a jungle rain forest, and a video arcade. Preferably the system is used in an on-line Internet based environment where other children viewed in the manner of their avatar are present. In this manner, the child may interact with other real children in a storytelling environment and therefore learn and grow as a result.

When the child starts a new adventure (frame), the game generates a story based on all, or a portion of, the data obtained or otherwise surmised during the psychological profiling. The adventure that is created is different than what would have been created had the psychological profiling

not been used or otherwise available. The system creates a continuity of the narrative by defining the interface and events within the adventure that remain similar during different modules within the adventure. Examples of these types of continuity interface and events include, for example, the weather, time of day, the child's equipment, the child's companion, the purpose of a multi-story quest, etc.

As an example, in the fairytale selection the system may construct multiple modules that create a storytelling environment. The dynamics of the modules permits the child to, for example (a) function with a group of strangers, (b) take on a teaching role in order to overcome shyness, (c) get over his frustration at not being able to perform a task perfectly, (d) address ways to help him overcome his fear of the dark, and (e) likewise his fear of what's different.

To provide a dynamic ever changing storytelling world, the storytelling sequences are designed to fit together and share resources dynamically. The structure of such storytelling sequences are based, at least in part, on the psychological profile of the user and the requirements for each frame. Referring to FIG. 4, such a storytelling sequence may include many different factors for the generation of the storytelling sequences. The following elements may be included for a frame, if desired, (a) mapping the psychological profile of the particular child to the sequence, (b) a sequence of potential choices and outcomes for the story, (c) a script for the particular events that are possible, (d) a script of dialog for the game to provide to the child, (e) secrets that the child may discover, (f) an environment model and texture (e.g., images), (g) usable object models and textures, and (h) character models and textures. For each child the storytelling sequences may be different based on these

factors, in this manner the environment will be dynamic and ever changing. As an example, the basic story may be designed merely as a framework to which is dynamically added details that accommodates the needs and desires of the particular child based, at least in part, on their psychological profile.

Many games are based on the accomplishment of certain tasks and thereafter providing a reward to the child based upon dexterity or problem solving, such as shooting monsters or figuring out a puzzle. The present inventor determined that a preferably reward technique is based upon social values, such as honesty, cooperation, bravery, compassion, and truth telling. For example, in a sports world the child's team gets a fifth down and the referee neglects to call it illegal. If the child does not call the illegal play then his team wins. However, this encourages cheating and is a poor social value. In contrast, if the child calls it an illegal play, the computer game may reward the child with points because it's a positive social value. To link this activity to the real world, the child may collect one or more socially responsible activities (or points) and redeem them, via the game, for real-world items, such as an autographed football.

In general, a storytelling environment may be based on a real-world game, such as baseball, football, basketball, or hockey that includes a well defined set of rules governing play. The storytelling activity may likewise include its own game with well defined rules governing play. The storytelling environment may permit cheating, or otherwise not following the rules. Preferably, this occurs if the profile indicates a need to work on following the rules. If the child elects to cheat then the child will win the game. However, if the child elects not to cheat or otherwise correct the storytelling activity which permitted the cheating, then the child may be rewarded

with a real-world reward such as an autographed baseball. In this manner the child is presented with ethical choices and is rewarded for sportsmanship as opposed to gamesmanship.

5 In another aspect of the present invention, the game may include real-time language translations so that multiple players around the world, each using a different language, may communicate with each other using a common language. In this manner, the game facilitates the cross
10 cultural learning with different cultures, especially in a storytelling environment suitable for children, without a significant language barrier.

 The unique storytelling presentation that is created is based on the personal psychological profile of
15 the user and the user's storytelling environment based adventures unique to each child. Accordingly, information is created that is unique to each child in addition to being inherently desirable to each child because it is based upon themselves. As such, the present inventor determined that
20 this provides a unique opportunity that was previously unavailable to incorporate "real-world" activities and promotions together with the storytelling to create an environment that transcends the virtual environment into the "real world".

25 Another aspect of the present invention includes a personalization of a virtual room or meeting place within the storytelling environment. Within this room the avatar (child) may store things collected, won, or otherwise obtained. In addition, the avatar may host parties with
30 other avatars (children), store music and videos created or otherwise obtained. This room may likewise be accessible by a link from a computer network, such as the Internet. Further, this room may provide links via the computer network to other rooms or locations. In this manner, each
35 avatar may have his own room, if desired.

One of the most important activities for the development of a child is to empower the child by listening to their story. Listening to the child may take many forms but in each case the child craves respect and desires to express himself. Accordingly, there is an unfulfilled need to provide tools and activities that assist children in expressing themselves. After consideration of this unfulfilled need the present inventor came to the realization that the existence of unique storytelling environments which are based upon a story of the child provide a unique opportunity to create other items that empower the child.

The present inventor further came to the realization that most trading cards are generally devoid of personal meaning for child and do not reflect their learning and life experiences. Referring to FIG. 5, as the user experiences the storytelling world based, at least in part, upon their own psychological profile the computer system will permit the user to create trading cards reflecting their experiences. In this manner, the trading cards will vary depending on the user's profile and/or game experiences, and thus be unique. The trading cards may be traded electronically among friends and acquaintances. In addition, the system includes the option of forwarding a data file with the appropriate information for the trading card(s) to an associated printing company together with the address of the child (or adult). The printing company, in turn, will print the trading card(s) in a suitable format and mail the completed trading card(s) to the child (or adult). In this manner, the child may collect trading cards that reflect their learning experiences within the game. In addition, the trading cards will inherently include personal meaning to the child. The trading cards may differ, for example, based on the desired format, the scenario completed, and/or the learning experience. It is also to be

understood that the trading cards may likewise be provided by a game that does not include a psychological profile. Normally, such trading cards will be based upon the user's experiences within the game.

5 The present inventor also came to the realization that children need to be honored and the best way to respect the child is to allow them to be heard. Accordingly, the extent to which a book may be particularized to the preferences or needs of any particular child, and to respect
10 the child in telling their own personal experiences, a customized book provides a direct expression of the individual. While an adult may select a book that he feels is appropriate for a child, undoubtedly a particularized book that honors the particular child is preferred. To
15 create children's books that are likely to be enjoyed by and honor a particular child's experiences, the present inventor came to the realization that the unique storytelling adventures based upon, at least in part, the child's psychological profile and/or game experiences may a readily
20 used by the computer system as the basis for a book. The dialogue, images, story based events encountered, and the child's avatar for any adventure, or part thereof, may be collected and formatted as a customized book for the child. Referring to FIG. 6, the book created by the computer system
25 may then be printed on an attached printer. If desired, the data file containing the book may be forwarded to an associated printing and binding company together with the address of the child (or adult). The printing and binding company, in turn, will print and bind the book in a suitable
30 format and mail the completed book to the child (or adult). In this manner, the child may obtain a unique book based upon their experiences within the game. In addition, the book will inherently include personal meaning to the child. The book may differ, for example, based on the desired
35 format, the scenario completed, and/or the learning

experience. It is also to be understood that the book may also be provided by a game that does not include a psychological profile. Normally, such a book will be based upon the user's experiences within the game. In addition,
5 the child (adult) may edit the book prior to being printed, if desired.

The present inventor also came to the realization that most postcards likewise do not honor any particular child. In addition, to best honor the child the postcard
10 should reflect the child's profile and/or storytelling experiences. To provide children's postcards that are most representative of his child's experiences, and honor the child, the present inventor came to the realization that the unique storytelling adventures based upon, at least in part,
15 on the child's psychological profile of the game may be readily used by the computer system as the basis for a postcard. The dialogue, images, story based events encountered, and the child's avatar for any adventure, or part thereof, may be formatted in the format of a customized
20 postcard for the child. Referring to FIG. 7, the postcard created by the computer system may then be printed on an attached printer. If desired, the data file containing the postcard may be forwarded to an associated printing company together with the address of the child or adult. The
25 printing company, in turn, will print the postcard or a set of postcards in a suitable format and mail the completed postcard(s) to the child or adult. In this manner, the child and adult may obtain unique postcards based upon their experiences within the game. In addition, the postcard will
30 inherently include personal meaning to the child and adult. The postcard may differ, for example, based on the desired format, the scenario completed, and/or the learning experience. It is also to be understood that the postcard(s) may also be provided by a game that does not
35 include a psychological profile. Normally, such postcards

will be based upon the user's experiences within the game. This system of using a game as the basis for real-life items is likewise suitable for greeting cards and the creation of audio compact discs of the particular soundtrack of the game that is encountered.

The present inventor also came to the realization that most children based movies do not honor any particular child. Accordingly, the extent to which a video may be particularized to the preferences or experiences of any particular child will best honor the child. The movie should reflect the child's profile and/or storytelling experiences. To provide children's videos that are most representative of his child's experiences, the present inventor came to the realization that the unique storytelling adventures based upon, at least in part, on the child's psychological profile of the game may be readily used by the system as the basis for a video. The dialogue, images, story based events encountered, and the child's avatar for any adventure, or part thereof, may be formatted in the format of a customized video for the child. Referring to FIG. 8, the video created by the computer system may then be stored on an appropriate media, such as an associated hard drive, or burned on a CD or DVD, for example. If desired, the data file containing the video may be forwarded to an associated video company together with the address of the child or adult. The video company, in turn, will create the video in a suitable format and medium, and mail the completed video to the child or adult. In this manner, the child and adult may obtain unique videos based upon their experiences within the game. In addition, the video will inherently include personal meaning to the child and adult. The video may differ, for example, based on the desired format, the scenario completed, and/or the learning experience. It is also to be understood that the video may also be provided by a game that does not include a

psychological profile. Normally, such a video will be based upon the user's experiences within the game.

It is also to be understood that the same techniques may be applied to toys, such as trucks, cars, action heros, etc. that are based upon the game. The toys that are provided to the user will include unique attributes that would not be included otherwise. In other words, each child will get a toy that is customized in some manner for them based upon the game. Preferably, the toy is customized by the game and associated toy manufacturer to resemble your avatar in many characteristics and in addition, if desired, likewise based on the previous game playing. Also, the child may select an image of an item from the storytelling environment which is customized in some manner and the system will manufacture such an item to be provided to the child.

The computer based world of gaming or otherwise storytelling has been evolving by incorporating videos and other media based applications therein. Based upon the capability of the storytelling computer system to create unique experiences that are individualized for each child, the computer system inherently provides unique stories that are based upon the interaction with children. Based on the availability of unique stories, the present inventor came to the realization that the computer based, preferably on-line, gaming environment may be incorporated into the traditional entertainment industry in the form of game shows, children's shows, or otherwise incorporated into television based shows. This incorporation may likewise be done in real-time as the television show is being presented.

After further consideration the toy may be extended for use off-line by downloading information, preferably personalized information, from the particular story to the toy. In this manner, even without the computer, the child may still interact with a toy that is

personalized with on-line information. Further, the toys may be interconnected to the network, if desired, to provide updates to its programming during play with the child.

Also, this permits the story to develop on-line and likewise off-line by interaction with the toy. The interaction with the toy may likewise be uploaded back to the on-line story environment. In essence, the toy learns how to behave based on the child's interaction with that character on-line. It thus provides way to blend the on-line and off-line environment, and continue with the personalization.

For purposes of illustration, an exemplary storytelling and learning environment, based upon psychological profiles, is shown. It is to be understood that any storytelling and learning environment may be used, as desired. The characters and their profiles used in the environment are as follows:

Jake:

A 6 year old boy.

Loves to play soccer.

Enjoys physical activity.

Enjoys taking things apart to learn about them.

Likes the Backstreet Boys.

Is shy in new situations.

Has a hard time if others do not "play by the rules".

Is the hero of the story.

Ribbie Dee:

A young female frog from a huge family.

For a little frog in a big pond, she's quite gutsy.

Hip and bubbly personality.

Joey Ru:

He is all hop and no bop.

Talks a big game but he is a little roo at heart (e.g., cowardly).

Finds it difficult to stop jumping and is very energetic.

Always hungry.

Keepers:

5 Generally male and female without being gender specific.
They are tricksters, like elves, always wanting to keep what they find.
Perpetually in the terrible two's.
10 Have their own language of grumbles and made up words.

Narrator:

It is as if he is telling a story to a group of kids.

15

Referring to FIG. 9, the first scene of the environment illustrates Jake walking in a forest in a land called Archadia. Jake hears a sound of a game being played and desires to find out who is playing the game. Referring to FIG. 10, Jake moves toward the sound but finds the path blocked by rocks. The environment providing the rocks offers the opportunity for Jake to engage in activity consistent with his profile, namely, "Enjoys taking things apart to learn about them". With Jake being confronted by the rocks, Jake found that he could learn a lot about what the forest was made of. Jake may learn about the forest by performing the action of chopping up the rock, as shown in FIG. 11. The environment providing the capability of chopping up the rock provides a learning exercise to find out what a rock is made of.

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Referring to FIG. 12, the second scene of the environment illustrates Jake meeting a Kangaroo and a Frog playing a strange game. Jake observes that the Kangaroo and the Frog are playing a game that looks like soccer but without any rules. Jake desires to join in but is unsure

35

how to. The environment provides the strange game which offers the potential opportunity for Jake to engage in activity consistent with his profile, namely, is shy in new situations, has a hard time if others do not "play by the rules", loves to play soccer, and enjoys physical activity. Jake speaks in a timid and shy voice, "Hey guys! You're ... supposed to ... kick it ... with your feet." The animals are too busy playing to notice Jake. Referring to FIG. 13, Jake takes out a soccer ball from his backpack and kicks the ball through a narrow opening between two trees... it gets the animals attention! Ribbie Dee (the Frog) exclaims, "WOW! Who are you? What is that black and white thing?" Jake in a shy voice replies, "I am Jake. It is ... a soccer ball." Joey (the Kangaroo) exclaims, "I'm Joey Roo! Dozo yosoriku. Boku ga Joey Ru da! Bienvenidos a Archadia. Soy Reggie Ru!" Ribbie Dee then exclaims, "Ribbie Dee-lightful to meet you. Salut! Je m'appelle Ribbie Dee. Ciao Jake! Mi chiamo Ribbie Dee."

In the third scene, while initially teaching Ribbie Dee and Joey Roo to play soccer, Jake is frustrated because it is difficult for the animals to learn a new game. The environment allows Jake to teach soccer which offers the potential opportunity for Jake to engage in activity consistent with his profile, namely, enjoyment of physical activity and having a hard time if others do not "play by the rules". Jake states, "You are suppose to kick the ball to me now!" Joey Roo replies, "Sorry. I just get so excited!" Jake sticks with it and soon everyone are all having fun and playing by the rules. Referring to FIG. 14, Joey Roo then bops the ball very hard with his head causing the ball to sail into the forest.

In the fourth scene, after bopping the ball, the sky then suddenly gets very dark. A discussion then states.

Joey states, "Oh no! It is happening again."

Jake states, "What is happening?"

Joey states, "The lights in the sky are disappearing. The moon went first. My mom thinks it is the Giraffes."

Dee states, "Giraffe's necks are not long enough to reach up to steal the stars! Let's go. I am scared!"

5 Joey states, "I am scared and hungry."

Jake states, "What about my ball?"

Joey states, "It is really dark and horrible in there ... And Roos do not see well at night. Not well at all."

Jake states, "Wait! I have something that will help."

10 Referring to FIG. 15, Jake takes out a flashlight which alleviates the darkness and the scary area.

Joey states, "No way!"

Dee states, "No way!"

In Archadia, nobody had ever seen such a light stick. But
15 even with the light stick, Jake's new friends were concerned about going into the forest.

Referring to FIG. 16, in the fifth scene, a four-legged hairy creature arrives, Freddy. Jake excitedly exclaims, "Freddy! Hey guys, this is my dog Freddy!"

20 Freddy appears to want to show the guys something and have the guys follow him. Jake states, "If we stick together we shall be okay. Come on, Freddy needs us!" Freddy "states", "Woof - ruff ruff." Referring to FIG. 17, the animals, Jake, and Freddy walk into the forest.

25 Referring to FIG. 18, in the sixth scene, they come to a strange place lit by a single shining star. Joey states, "Just let something try to get me. I'll, well I'll just punch and ooooh! Help! Something got me!" Dee states, "You are all hop and no bop. There is nothing
30 there." Jake then notices tiny footprints on the floor and Freddy barks and scrapes at a crack in the ground. The environment provides the new situation of footprints and a crack in the ground which offers the potential opportunity for Jake to engage in activity consistent with his profile,
35 namely, being shy in new situations. In this of this new

situation, Jake turns and shines his flashlight on a little striped creature grabbing Freddy, as shown in FIG. 19. The striped creature, named Keeper One, proclaims, "Finders Keepers!" Jake attempts to solve this taking of his dog
 5 Freddy by grabbing Freddy back, but the creature moves to fast. Another striped creature, named Keeper Two, proclaims, "We find. We keep. We Keepers!" Jake excitedly states, "But he is my dog!" In response, Keeper One states, "Have better something?". Jake is now puzzled by this
 10 potential loss of Freddy and needs to find a way to keep his dog.

Referring to FIG. 20, in the seventh scene, the Keepers wanted Jake and his friends to pile everything The Keepers had collected to make a high tower. When they were
 15 done, a Keeper let Freddy go and raced up the stack, as shown in FIG. 21. The Keeper exclaims, "Last star! Keep, Keep!" Joey states, "I'm hungry." After being tricked into helping the Keepers take the last star from the sky, Jake felt sad, and went back to the Keeper's Lair to find the
 20 star and return it to the sky.

Referring to FIG. 22, in the eighth scene, Jake then searched and found what Freddy was trying to show them before, namely, hidden in the cracks in the ground was a golden glowing ball. Joey states, "What is it?" Dee
 25 states, "It is a star, silly old hop. But we still need the rest of them." The environment provides the new situation of what to do with ball which offers the potential opportunity for Jake to engage in activity consistent with his profile, namely, overcome being shy in new situations.
 30 Referring to FIG. 23, Jake holding up the ball states timidly, "Come out Keepers! I have got your star!" Joey states, "You tell them, Jake. I am right behind you. Right here, buddy." Jake states more assuredly, "This time, I am putting it back in the sky where it belongs." After

gathering his courage, Jake throws the star into the sky, where it shines brightly, as shown in FIG. 24.

Referring to FIG. 25, in the ninth scene, the Keepers came out from hiding. The keepers state,

5 "Acusiwasa, nabo! Nooo! Keep! Grumble, grumble, GRUMBLE!", attempting to intimidate Jake. Joey states, "Jake, maybe you should, do what they are....". Dee states, "Joey! Shhh!" Keepers state, "Grumble, Grrrrr. Ahhhkawasi. Kabodowa. Grrrrrrrrrr." But Jake was not afraid anymore.

10 Jake stares them down and states in a strong voice, "The stars are for everyone to share, they are no one's to keep." The environment provides the new situation of what to do with ball which offers the potential opportunity for Jake to engage in activity consistent with his profile, namely,
15 overcome being shy in new situations. The Keepers state, "Hnnnnnnnn?" No one had ever stood up to the Keepers like that. The Keepers did not know what to do. As for the stars they never look or sounded more beautiful as Jake returned them to the sky, as shown in FIG. 26.

20 The terms and expressions which have been employed in the foregoing specification are used therein as terms of description and not of limitation, and there is no intention, in the use of such terms and expressions, of excluding equivalents of the features shown and described or
25 portions thereof, it being recognized that the scope of the invention is defined and limited only by the claims which follow.